Low-income children

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Childhood poverty has been the focus of more than a few studies. Some of these studies have indicated that children who experience poverty, especially persistently, are at higher risk of encountering difficulties—health problems, developmental delays and behaviour disorders—and they are also more likely to fall into low income themselves in adulthood (Kornberger et al. 2001, Finnie and Bernard 2004). The negative effects associated with poverty are inconsistent with the general opinion that all children should live in conditions that allow them to reach their full potential.

But defining and measuring poverty among children is not straightforward, not only because for the most part children do not earn any income, but also because Canada, like many developed nations, has no official definition of poverty. Even so, it does have surveys of family income that enable various measures of low income to be defined. Some analysts question the validity of family income as an indicator of children's well-being, and still wonder about the actual link between the low-income experience, especially temporary, and an increased risk of encountering problems in adulthood. However, most agree that it is unfortunate when families with children do not have a sufficiently high income for suitable housing, food, clothing or some family activities.

Using the *Survey of Labour and Income Dynamics* (SLID) and the survey that preceded it, this study looks at changes in the number, proportion and characteristics of children living in families whose income falls below various low-income cut-offs (Statistics Canada 2006). The starting point is 1989, the peak of the previous economic cycle. Since the recession of 1990/1992, Canada has enjoyed a lengthy period of expansion, which could be expected to have had a positive impact on family incomes. However, despite sustained economic growth since the mid-1990s and the implementation of a federal program in 1998 to reduce child poverty in Canada (the National Child Benefit), the rate of low-income among children was no lower in 2004 than in 1989 (Chart). The objective of this study is to learn more about children with low-income status in Canada (see *Data source and definitions*).

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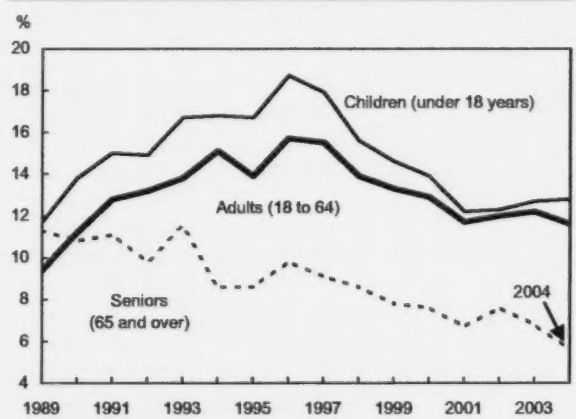
Rate and severity of low income among children in 2004

According to the low income after tax cut-off (LICO-IAT), 872,000 children under the age of 18 in 2004 (or 13% of all Canadian children[1]) lived in low-income families, whose average income after tax was $21,400. On average, these families would have needed an additional $8,000 not to be considered low income.

Chart Evolution of the rate of low income in children, working-age adults and seniors



Source: Statistics Canada, Survey of Labour and Income Dynamics.

Data source and definitions

The **Survey of Labour and Income Dynamics** (SLID) has collected information on income, labour and the characteristics of individuals and their families since 1993. SLID allows both cross-sectional and longitudinal analysis.

SLID samples selected for this study were from 1994 to 2004 for the cross-sectional analysis, and from 1999 to 2004 (Panel 3) for the longitudinal analysis.

The target population for the cross-sectional analyses was children under the age of 18. In 2004, roughly 6.8 million children lived in 3.8 million economic families.

The target population for the longitudinal analysis was children between the ages of 0 and 12 in 1999 (to ensure that no child would be over age 17 by 2004) for whom information was available every year between 1999 and 2004. Close to 4 million children met this criterion.

The trend analysis was limited to the period 1994 to 2004 because income data published in 2003 had major revisions for 1980 to 2003. These changes affected the low-income statistics, but only the most up-to-date SLID files were publicly available and not the Survey of Consumer Finances (the income survey prior to SLID).

Low-income measures:
While no generally accepted definition of 'poverty' exists in Canada, the following low-income measures are widely used: the **low-income cut-off** (LICO) before and after tax, the **low income measure** (LIM) before and after tax, and the **market basket measure** (MBM).

With each of these measures, individuals—in this case, children—are considered to be in low income in a given year when the annual income of their economic family is below a pre-determined cut-off.

Individuals are in **persistent low income** when their annual family income cumulated over several consecutive years is below the total of the low-income cut-offs associated with their family for the same period.

An **economic family** comprises all individuals living under the same roof and related by blood, marriage, common-law marriage or adoption.

For more information on the LICO, LIM and MBM, please consult the following documents:

1) http://www.hrsdc.gc.ca/en/cs/sp/sdc/pkrf/publications/research/2002-000662/SP-628-05-06e.pdf
2) http://www.statcan.gc.ca/english/research/75F0002MIE/75F0002MIE2004011.pdf

Given that the **low income after tax cut-off** (LICO-IAT) is the most widely used in Canada, it was used for this study. However, the market basket measure was also used to test the validity of the results—most of the results stood up to the change in measure.

Almost half of these low-income children lived in a situation that could be considered fairly severe since their family's income was below 75% of the low income after tax cut-off. By contrast, the average family income for children not in low-income families that year was 3.4 times higher, at $72,800.[2]

Overall, market income accounts for 80% of total income for families with children, but for only 40% among low-income families with children. The latter received a greater proportion from social assistance, child benefits and other transfers. Nevertheless, less than two in five low-income children (38%) lived in families that received social assistance in 2004, and more than four in five were able to count on some market income (85%).

Certain family characteristics increase vulnerability to low income

Family work effort and type are the factors most strongly associated with the risk of low income for children. According to specification A of the logistic regression model (Table 1), children who lived in a family whose main income recipient was not in the labour market for most of the year were the most vulnerable to low income in 2004, followed by those whose main income recipient was unemployed or still in school. Children whose main income recipient was self-employed also had a higher risk of being in low income than those whose main income recipient was an employee. Furthermore, regardless of the main income recipient's labour market status, children from single-parent families were much more vulnerable to low income than children from two-parent families. Children who lived in families with several siblings were also more vulnerable to low income.

However, living in a two-parent family is not a guarantee against low income, since half of low-income children (51%) lived with two parents in 2004. Children's vulnerability to low income depends not only on their family type, but also on the family's work ability and effort.

More than two-thirds (68%) of all Canadian children lived in families with two income earners in 2004, compared with only one in five low-income children (21%). Although in many cases (45%) the low-income children's family type simply did not allow for the possi-

Table 1 Impact of personal and family characteristics and main income recipient on risk of low income among children

	Distribution		Specification A		Specification B	
	Low income					
	Yes	No	Estimated probability[1]	Difference with lowest	Estimated probability[1]	Difference with lowest
	%		%	% point	%	% point
Children's characteristics						
Boy	52.2	51.7	12.8	0.0	13.0	0.3
Girl	47.8	48.4	12.9	0.1	12.7	0.0
Under age 6	29.8	29.6	12.3	0.0	12.8	0.0
Age 6 to 11	36.0	32.9	13.0	0.7	12.9	0.1
Age 12 to 17	34.2	37.6	13.1	0.8	12.9	0.1
Region of residence						
Atlantic	6.2	7.0	14.7	3.2*	17.1	5.8*
Quebec	18.9	22.9	11.5	0.0	11.3	0.0
Ontario	40.8	40.5	13.2	1.7	12.5	1.2
Prairies	16.7	18.0	12.5	1.0	12.1	0.8
British Columbia	17.4	11.6	14.1	2.6	16.0	4.7*
Size of inhabited region						
Rural	5.4	14.1	5.1	0.0	5.2	0.0
Urban, population under 500,000	35.0	38.8	11.5	6.4*	11.3	6.1*
Urban, population 500,000 and over	59.6	47.1	16.4	11.3*	16.5	11.3*
Family type						
One parent	45.3	12.1	27.9	18.7*	33.5	25.0*
Two parents	51.3	85.0	9.4	0.2	8.5	0.0
Other family	3.1	2.9	9.2	0.0	12.2	3.7
One child	18.9	24.1	9.6	0.4	8.8	0.0
Two children	35.4	46.3	10.9	1.3	10.7	1.9
Three or more children	45.8	29.3	18.1	8.5*	19.4	10.6*
Main income recipient[2]						
Under age 30	15.6	7.4	19.1	8.4*	21.9	11.6*
Age 30 to 39	46.2	39.3	14.0	3.3*	14.0	3.3*
Age 40 and over	38.3	53.4	10.7	0.0	10.3	0.0
Education						
Less than high school diploma	19.5	11.2	17.8	9.2*	19.6	12.3*
High school diploma	31.6	22.3	14.3	5.7*	15.6	8.3*
More than high school diploma	36.9	39.7	12.4	3.8*	11.3	4.0*
University	11.8	26.7	8.6	0.0	7.3	0.0
Work limitations						
Yes	16.8	6.9	15.4	2.8	20.1	7.9*
No	83.2	93.1	12.6	0.0	12.2	0.0
Recent immigrant						
Yes	12.8	5.4	22.2	10.5*	26.8	15.5*
No	87.2	94.6	11.7	0.0	11.3	0.0
Aboriginal off-reserve						
Yes	8.0	4.0	16.4	3.7	17.5	4.9*
No	92.0	96.0	12.7	0.0	12.6	0.0
Main activity						
Employee	26.2	76.6	5.6	0.0	..	..
Self-employed	18.9	15.7	15.8	10.2*	..	..
Unemployed	8.4	1.9	34.3	28.7*	..	..
Student	9.0	1.2	27.2	21.6*	..	..
Not working	33.8	4.7	39.3	33.6*	..	..

* difference in predicted probability is statistically significant to a confidence level of 95%

1. Corresponds to the probability that a child with a particular characteristic would be in a low-income situation compared with another child without this characteristic, all others being equal.
2. Since the main income recipient gender variable is too closely correlated with being in a one-parent family, it has been omitted from the regressions.

Source: Statistics Canada, Survey of Labour and Income Dynamics, 2004.

bility of two income earners (e.g. single-parent families), many others lived in families in which not all the parents were employed. In particular, for more than one-third (34%) of low-income children from single-parent families, the parent did not declare any earnings, and more than 60% of low-income children from two-parent families lived in a family in which neither or only one parent declared earnings.

Moreover, parents' labour market participation does not always protect children from low income. In 2004, more than 40% of low-income children lived with at least one parent who declared a significant work effort (i.e. worked at least 910 paid hours during the year), and more than 20% lived in families with at least two earners.

Parents' work does not always protect children from low income because some parents have working conditions that do not enable them to meet their family's financial needs. Low-income children's parents who worked in 2004 had less favourable working conditions than other workers. They worked fewer hours (500 fewer),[3] were more likely to be self-employed (33% versus 16%), and had atypical work schedules (33% versus 25%). In addition, chances were much higher that they earned less than $10 per hour (49% versus 4%), had non-unionized jobs (85% versus 63%) or had jobs that did not offer additional benefits such as a dental or supplementary health plan (61% versus 17%).

In addition to family work effort, parents' working conditions and family type, some parents' personal characteristics are associated with a greater vulnerability of children to low income. Children dependent mainly on one parent with at the very most a high school diploma, who was under the age of 30, a recent immigrant, an Aboriginal person living off-reserve or who had limitations at work were at higher risk of having low family incomes in 2004.[4] However, the association between low income and the last two characteristics was statistically significant only when the main income recipient's labour market status was omitted from the model (Table 1, specification B). This means that these characteristics affect family income through their influence on labour market participation. However, in the absence of information on parents' labour market status, children who depend primarily on one parent with a limitation at work or of Aboriginal origin were at higher risk of low income. The three other characteristics (being of recent immigrant status, having no more than a high school diploma, or being under the age of 30) were associated with low income for children even when the main income recipient's labour market status was taken into consideration, but to a lesser degree.

A third model specification was also used to capture the effect of the total family work effort. It indicated that family work effort is the best predictor of low income for children. Its effect was even more significant than the labour market status of the family's main income recipient or the family type. Children who lived in families with no earners were at the greatest risk of low income. In fact, their probability of living in a low-income situation was 71% in 2004. By contrast, the probability of low income among children who lived in a family whose main income recipients declared not being in the labour force for most of the year was 39%. Furthermore, this specification showed that children in families with one earner (single-parent family or not) were more likely to live in low income (23%) than children who could count on the economic support of two parents (5%).

To date, the association between children's place of residence and the risk of being in a low-income situation has not been analyzed. Given that the LICO-IAT does not control for differences in the cost of living in different communities of the same size in Canada, it is difficult to establish a firm link between the region of residence and the probability of low income among children.

Using LICO-IAT suggests that children who lived in rural areas were much less at risk of belonging to low-income families in 2004 than children in large cities (their estimated low-income probabilities were 5% and 16% respectively). However, with the market basket measure, which accounts for differences in the cost of living across communities, children's vulnerability to low income was very similar whether they lived in rural or urban areas (16% versus 17%).

Furthermore, with the LICO-IAT, only children in the Atlantic provinces stood out as being at slightly higher risk of low income compared with children elsewhere in Canada. However, the market basket measure revealed more significant provincial differences in the vulnerability of children to low income. For example, children in British Columbia were the most likely to be in a low-income situation in 2004 (their low-income probability was estimated at 23%), followed by children in the Atlantic provinces (20%). Children in Quebec were the least vulnerable (8%).

Table 2 Evolution of the severity of situation of low-income children

	Low income			Not low income
	Income[1]	Difference[2]	Severe situation[3]	Income[1]
	2004 $	%	%	2004 $
1994	20,200	29.6	52.5	60,200
1995	19,700	30.3	53.3	60,600
1996	20,000	29.3	50.3	61,300
1997	20,100	29.8	50.7	62,500
1998	20,300	29.2	51.5	63,900
1999	20,600	28.4	47.4	65,500
2000	21,300	27.0	43.1	68,400
2001	20,500	28.3	47.9	70,100
2002	20,700	28.2	49.1	70,000
2003	20,700	28.1	46.5	70,400
2004	21,400	27.7	48.3	72,800

1. After tax.
2. The formula used to calculate the difference in income for each low-income child is the following: 1-(family income after transfers and tax ÷ low-income cut-off after tax).
3. Family income after transfers and tax for low-income children is below the 50% low-income cut-offs associated with their family.

Source: Statistics Canada, Survey of Labour and Income Dynamics.

between the family income of low-income children and their low-income cut-off was 30% in 1994, slightly but not statistically different than the gap 10 years later (28% in 2004) (Table 2). The proportion of low-income children in severe low income was 53% in 1994, slightly higher than the 2004 rate (48%). However, the average family income difference between low-income children and other children was greater in 2004 than in 1994 ($51,400 compared with $40,000).[6] This increase in income inequality seems to be due to a significant increase in the family income of children not living in a low-income situation during this period—more specifically, a major income increase for families at the highest end of the income distribution—rather than an income decline for economically disadvantaged families.

Income taxes and transfers play an important role in reducing low income

Every year between 1994 and 2004, the redistribution of income through income taxes and transfers helped reduce the rate and severity of low income for children. Comparing market income, rather than income after tax and transfers, with the Statistics Canada low income after tax cut-off, shows that 22% of children, rather than 13%, would have had low-income status in 2004 (Table 3)—i.e. an additional 584,000 children

Since the market basket measure is more specific in determining differences in the cost of living across Canada, it should generally be more effective in identifying the impact of the region of residence and its size on the rate of low income among children.

Changes in low income among children in the past few years

From 12% in 1989, low income among children steadily increased to a peak of 19% in 1996, before declining to 12% in 2001. Since then, it has remained fairly stable despite sustained economic growth.[5] Furthermore, the severity of low income among children remained fairly stable between 1994 and 2004. The average difference

Table 3 Low income in children, comparing low-income cutoffs after tax, with market income or income after tax

	Rate		Number of children		Difference	
	Market income	Income after tax and transfers	Market income	Income after tax and transfers	Market income	Income after tax and transfers
	%		'000		%	
1994	25.1	16.8	1,753	1,174	63.5	29.6
1995	25.0	16.7	1,753	1,171	63.9	30.3
1996	28.0	18.7	1,968	1,319	61.4	29.3
1997	26.6	17.9	1,871	1,260	61.4	29.8
1998	24.8	15.6	1,737	1,093	60.3	29.2
1999	22.9	14.6	1,596	1,015	58.4	28.4
2000	21.5	13.9	1,491	967	57.0	27.0
2001	21.5	12.2	1,484	844	55.8	28.3
2002	22.1	12.3	1,519	849	53.6	28.2
2003	21.7	12.7	1,480	867	54.8	28.1
2004	21.5	12.9	1,456	872	53.9	27.7

Source: Statistics Canada, Survey of Labour and Income Dynamics.

Cross-sectional analysis

To estimate the impact of certain characteristics on the risk of low income among children in 2004, a logistic regression model was used. The binary dependent variable had a value of 1 if the child lived in a low-income family in 2004, 0 otherwise.

Explanatory variables covered children's personal characteristics, as well as family and main income recipient characteristics. Given the important interactions between different explanatory variables of interest, different specifications were estimated.

Specification A included all the children's personal characteristics, as well as the characteristics of their family and the main income recipient, *including labour market status*. This regression was used to determine the importance of the association between the labour force attachment of the family's main income recipient and the risk of low income. However, the effects of a number of other characteristics were reduced, since they are partly captured through the impact they have on the labour market status of the main income recipient.

Specification B included all the children's personal characteristics, as well as the characteristics of their family and the main income recipient, *excluding labour market status*. This regression was used to determine the direct association between several characteristics that affect labour market status and then the risk of low income.

Specification C included all the children's personal characteristics, as well as the characteristics of their family and the main income recipient, *excluding labour market status but including total family work effort*. Given that family type (single-parent, two-parent or other) and the main income recipient's labour market status (employee, self-employed, unemployed, student, not working) are too strongly correlated to the total family work effort, these two variables had to be excluded from the model in order to see to what extent the total number of income earners in the family was associated with low income.

Since the coefficients estimated using Logit are not easy to interpret (due to the non-linear nature of the Logit-type function), the predicted probabilities were derived from the coefficients estimated for each selected model specification. Only those probabilities derived from estimated coefficients significantly different from zero (with a 95% confidence level) were discussed.

in the absence of income redistribution. Moreover, the low-income gap would have been 54% in 2004, rather than the observed 28%.

Every year since 1994, income taxes and transfers reduced the rate of low income for children by eight or nine percentage points. However, their impact on low-income severity in 2004 was less than it had been 10 years earlier. Taxes and transfers reduced the low-income gap by an average of 26 percentage points in 2004 compared with 34 in 1994.

Every year, government transfers represented a significant proportion of the after-tax income of low-income families with children—between 59% and 67%. However, the source of these transfers evolved significantly between 1994 and 2004. Since 1999, the most important source has been child benefits (federal and provincial), whereas in previous years, social assistance represented the biggest portion of transfer income. More specifically, 36% of the income of low-income families with children in 1994 was from social assistance, while 16% came from child benefits. Ten years later, these proportions were practically reversed, with 31% of their family income coming from child benefits and 17% from social assistance (Table 4).

Table 4 Income components after transfers and tax for low-income families with children

	Income	Net market income	Social assistance	Employment Insurance	Benefits for children	Other transfers
	2004 $			%		
1994	18,900	35.5	35.8	6.3	16.0	6.3
1995	18,500	34.9	36.4	5.9	15.9	6.8
1996	18,700	33.5	36.2	3.8	18.3	8.1
1997	18,500	33.7	33.1	3.9	20.0	9.2
1998	18,500	32.9	29.8	4.1	25.1	8.2
1999	19,000	35.7	25.8	2.3	27.0	9.2
2000	19,200	38.0	22.4	2.8	28.2	8.6
2001	18,700	34.8	23.0	2.4	30.1	9.6
2002	18,900	37.9	21.2	2.9	30.2	7.7
2003	19,300	38.1	20.4	3.7	29.8	8.1
2004	19,700	40.8	16.7	3.5	31.1	7.6

Source: Statistics Canada, Survey of Labour and Income Dynamics.

Adding up all the low-income gaps indicates that a total of $3.3 billion in additional income (from market income, transfers or other sources) would have been required for all low-income families with children to move above the low-income thresholds in 2004.

Children no more likely to be in a family vulnerable to low income in 2004 than in 1989

Many factors can make the rate of low income in children vary over time, including changes in the economy, government interventions, and changes in population composition. Regression analyses using 2004 data have revealed that some family characteristics are associated with a higher risk of low income for children. If the proportion of children in families with characteristics strongly associated with low income grows, then a greater proportion of all children will be vulnerable. This type of trend could mitigate the impact of economic growth and government interventions on low income among children. However, this does not seem to have been the case between 1989 and 2004.

In fact, the distribution of children based on certain characteristics identified as low-income risk factors precludes the conclusion that children were more likely to be in a family at high risk of low-income in 2004 than in 1989 (Table 5). On the one hand, they were more likely to be in a single-parent family or in a family whose main income recipient was a recent immigrant. On the other hand, fewer depended on a main income recipient under the age of 30 with less than a high school diploma. The rate of low income for children based on their family characteristics also evolved little during this period. While it grew for children of recent immigrants and children in families with one income earner and three or more children, it fell for children in families with no income earners and children in single-parent families.

Table 5 Children's family and main income recipient's characteristics and low income rate among children

	1989		2004	
	Children	Rate of low income	Children	Rate of low income
	'000	%	'000	%
All children	**6,684.8**	**11.7**	**6,784.1**	**12.9**
			%	
Family				
Two parents	85.5*	7.0	80.8*	8.2
Single parent	12.2*	44.0*	16.3*	35.7*
Other family type	2.4	15.8	3.0	13.6
0 income earners	4.6	84.0*	4.0	78.8*
1 income earner	25.1	19.6*	24.5	26.1*
2 or more income earners	70.2	4.1	71.5	4.6
1 or 2 children	68.8	11.0	68.6	10.2
3 or more children	31.2	13.2*	31.4	18.7*
Main income recipient				
Under age 30	13.1*	25.7	8.4*	23.9
Less than a high school diploma	27.8*	21.5	12.2*	19.6
Recent immigrant	6.7*	22.6*	9.4*	26.1*

* the estimates are statistically different between 1989 and 2004
Source: Statistics Canada, Survey of Consumer Finances, 1989; Survey of Labour and Income Dynamics, 2004.

For many children, low income is a transitory situation

A snapshot of low income children for one year does not provide a complete picture of the situation. Indeed, several consecutive years of data provide additional useful information. For instance, the proportion of children affected by low income over a six-year period is much higher than in a single year. Of the children under age 13 in 1999, 22% experienced low income at least one year between 1999 and 2004, compared with just 12% in 1999. But the longer time frame also reveals that a small proportion of children are in a persistent low-income situation. Between 1999 and 2004, 3% of children under age 13 in 1999 (or just less than 100,000) were in a low-income situation for all six years (Table 6).

Low income among children is a very dynamic phenomenon. The majority of children living in low income do not remain in that situation continuously, nor are children not in low income necessarily exempt from it. From 1999 to

Table 6 Persistence of low income

	'000	%
All children		
In 1999	486.1	12.3
At least 1 year	878.6	22.3
Every year	98.9	2.5
Persistent[1]	275.2	7.0
After at least 1 year in low income		
Only 1 year	317.9	36.2
2 years	185.9	21.2
3 to 4 years	190.9	21.7
5 to 6 years	183.9	20.9
Persistent[1]	275.2	31.3

1. Annual family income cumulated over several consecutive years is below the low-income cut-offs in the same period.
Source: Statistics Canada, Survey of Labour and Income Dynamics, 1999 to 2004.

2004, between 2% and 4% of children not in low income in a given year fell into it the following year. But between 28% and 46% of children in a low-income situation in a given year climbed out the following year.[7] However, approximately 30% of children who escaped low income between 1999 and 2000 re-entered it before 2005.

For children, entry into and exit from low income can be explained by changes in their family situation or their parents' labour market situation. Approximately 2% of children from 2003 fell into low income in 2004. For 42% of these children, the main reason was a change in their family environment (for example, parental separation or a new sibling); for 27%, it was mainly due to a lower employment income for the main income recipient; and for 31%, it resulted from a reduction in family income from other sources (transfers, second earner, etc.).

The main reasons behind children escaping low income are also interesting. Of the 28% of children in low income in 2003 but not in 2004, 20% escaped mainly due to a change in their family environment (for example, a new spouse for the parent or the departure of a sibling). The main reason for others was an increase in the income of their family members (50% due to an earnings increase for the main income recipient, and 29% from an increase in the family income from other sources).

Of all the children under 13 in 1999 who experienced low income for at least one year between 1999 and 2004, the average time in this situation was 2.7 years, or just under half of the study period. More than 30% of them experienced persistent in low income and 43% experienced low income from three to six years between 1999 and 2004, which represents a significant part of their childhood.

Only a few factors help predict persistence of low income for children

Of all the children in a low-income situation in 1999, only those whose main income recipient was not in the labour market, was 30 years of age or older or had at most a high school diploma had a significantly higher risk of persistent low income (Table 7). For example, the risk of persistent low income when the main income recipient was not in the labour market in 1999 was more than 60%, while it varied between 22% and 24% for low-income children whose parent was either self-employed or an employee. While a parent's self-employment seems to be a determining factor of low income among children in a given year, it is not associated with persistent low income. The same can be said for children in a single-parent family. In fact, the probability of persistent low income for children is similar for those in a single-parent (40%) or two-parent (45%) family, whereas in a given year, children in single-parent families are clearly at higher risk of low income. And low-income children whose main income recipient was under the age of 30 were at lower risk of persistent low income than those whose main income recipient was older, while for the risk of low income in a given year, the opposite was true (Tables 1 and 7).[8]

Conclusion

The proportion of children under the age of 18 living in a low-income family was virtually the same in 2004 as in 1989, despite the steady economic growth since the 1990-1992 recession. More than 12% of children lived in a low-income family in 2004, and more than 22% of children experienced an episode of low income between 1999 and

Longitudinal analysis

To estimate the impact of certain characteristics on the risk low-income children in 1999 had of experiencing persistent low income between 1999 and 2004, another logistic regression model was used. In this model, the binary dependent variable had a value of 1 if the low-income child in 1999 experienced persistent low income between 1999 and 2004, 0 otherwise. The explanatory variables were the same as those in specification A for the cross-sectional analysis, except some had to be categorized differently (e.g. variables on age and the education level of the main income recipient), given the limited number of observations.

Table 7 Impact of characteristics of low-income children under 13 years in 1999 on their risk of persistent low income

	Distribution of low-income children in 1999	Estimated probability of persistent low income from 1999 to 2004
	%	
All children	**100.0**	**41.5**
Boy	54.2	40.7
Girl	45.9	42.3
Under age 6	40.7	42.2
Age 6 to 12	59.3	42.1
Province		
Atlantic	10.9	48.8
Quebec	25.2	40.9
Ontario	31.8	34.6
Prairies	21.3	54.5
British Columbia	10.8	35.9
Region		
Rural	7.1	45.0
Urban, population under 500,000	38.1	48.8
Urban, population 500,000 and over	54.9	37.1
Family type		
Single parent	55.7	39.9
Two parents	41.3	44.6
Other family	F	F
One child	14.0	39.3
Two children	36.2	49.6
Three or more children	49.8	37.7
Main income recipient		
Under 30 years	23.6	33.5
30 years and over	76.4	44.8*
Educational level completed		
High school diploma	54.3	55.2*
More than a high school diploma	45.7	27.9
Work limitations		
Yes	10.9	49.5
No	89.1	42.0
Recent immigrant		
Yes	15.1	62.9
No	84.9	38.7
Aboriginal off-reserve		
Yes	5.8	58.1
No	94.2	41.3
Main activity during the year		
Employee	26.2	24.3
Self-employed	18.0	21.7
Unemployed	F	F
Student	8.6	53.1
Not working	42.7	60.8*

* difference in predicted probability is statistically significant to a confidence level of 95%

Source: Statistics Canada, Survey of Labour and Income Dynamics, 1999 to 2004.

2004. Children who experienced an episode of low income remained in this situation on average for almost half (2.7 years) of the 1999 to 2004 study period.

Furthermore, the severity of low income for children was the same in 2004 as 10 years prior, and since the economic situation of the well-off children in Canada improved significantly in the past decade, income inequality widened.

Family situation and parents' lack of employment are the factors that most influenced children's vulnerability to low income. While children in single-parent families were clearly more vulnerable to low income, those in two-parent families were not exempt from it. In 2004, more than half of low-income children lived in a two-parent family. Whether children were part of single- or two-parent families, their parents' labour market situation was a key determining factor in the risk of getting into a low-income situation. Children in families with no workers were the most vulnerable to low income, while those with one parent working were more vulnerable than those with both parents working. However, even parents' substantial work effort does not always protect children from low income if salary or working hours are insufficient.

Low income for children is a very dynamic phenomenon in Canada. Many children experience low income, but few remain in that situation for several consecutive years. In addition, in the last decade, income taxes and transfers have played an important role in reducing the rate and severity of low income among children. However, despite sustained economic growth and a significant increase in child benefits, many children remain in that situation in Canada. In 2004, low-income families with children would have needed more than $3 billion in additional income (from market income, transfers or other sources) to surpass low-income cut-offs.

Perspectives

Notes

1. Since the publication of Income in Canada: 2004, some minor changes have been made to the Survey of Labour and Income Dynamics data. These changes may slightly affect the number of children identified as being in a low-income family using LICO-IATs. As a result, the estimates of the number of low-income children that appear in the most recent Statistics Canada publication (877,000 according to the LICO-IATs) differ slightly from the estimates in this study (872,000).

2. The median family income of children not living in a low-income situation ($62,700) was significantly lower than their average income; however, this is not the case for low-income children ($20,600). This suggests that the average family income of children from financially well-off families was probably biased upward by very high income levels. Despite this difference, the median family income of children not living in a low-income situation was three times higher than that of low-income children.

3. It is not possible to determine whether the fewer working hours result from unfavourable labour market conditions or a lower work effort.

4. It is not possible to determine whether the greater vulnerability to low income of recent immigrants, individuals with work limitations and Aboriginal persons can be attributed to discrimination rather than to other characteristics not observed in the data.

5. The low income rates of 12.2% in 2001 and 12.9% in 2004 are not statistically different. After this study began, the 2005 and 2006 low-income data were published and showed that the rate of low income among children in 2005 was 11.7%, which equals the unrevised 1989 rate. Revisions to the 1989 data would likely raise the rate of low income that year only slightly, not enough to make it significantly different from the 2005 rate.

6. This statement is also true for income adjusted to take family size into account, when a purely relative measure is used (LIM-IAT) to identify low-income children, and when the median rather than the average income is compared, although in the latter case, the difference is smaller.

7. Even though the annual exit rates are much higher than the entry rates, it does not necessarily mean that fewer children live in low income every year. The entry rate into low income is the proportion of children who did not live in a low-income situation in a given year, but did the following year, while the low-income exit rate is the proportion of children who lived in a situation of low income in a given year, but did not the following year. Since different denominators are used, even if the exit rate seems higher than the entry rate, the absolute number of people who escape low income is not necessarily higher than the absolute number of people entering low income. For example, between 2003 and 2004, the 2.3% entry rate corresponded to 84,000 children, while the exit rate of 28.4% equalled 99,000 children.

8. While few characteristics are associated with significant persistent low income, it is perhaps due to the small number of observations available for analysis. Among other things, the results lead one to believe that recent immigrant status is positively associated with persistent low income for children.

■ References

Finnie, Ross and André Bernard. 2004. *The Intergenerational Transmission of Lone Mother and Low Income Status: Family and Neighbourhood Effects*. 24 p. http://www.cerforum.org/conferences/200406/papers/Finnie-Bernard.pdf (accessed May 5, 2008).

Kornberger, Rhonda et al. 2001. "Welfare or Work: Which is Better for Canadian Children?" *Canadian Public Policy*. Vol. 27, no. 4. p. 407-421. http://economics.ca/cgi/jab?journal=cpp&view=v27n4/CPPv27n4p407.pdf (accessed May 5, 2008).

Statistics Canada. 2006. *Low Income Cut-offs for 2005 and Low Income Measures for 2004*. Statistics Canada Catalogue no. 75F0002MIE – No. 004. Income Research Paper Series. Ottawa. 37 p. http://www.statcan.ca/english/research/75F0002MIE/75F0002MIE2006004.pdf (accessed May 5, 2008).